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## EUROPEAN PATENT APPLICATION

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### (54) Multiple port register file with interleaved write ports

(57) A high speed register file is provided for use with Very Long Word Instruction (VLIW) and N-way superscaler processors. The high speed register file includes a selected number of copies of a general purpose register (GPR) building block. The GPR building block

includes at least two interleaved sub-banks of registers. Each of the sub-banks includes a number N of write ports and a number M of read ports. The sub-banks are interleaved by write ports and have non-interleaved read ports.

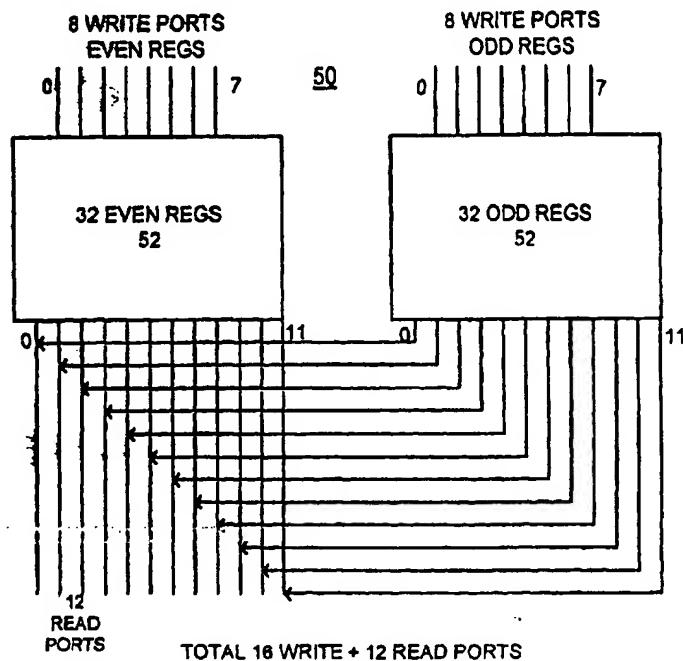


FIG.1



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## EUROPEAN SEARCH REPORT

Application Number  
EP 96 48 0056

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.6)						
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim							
A	EP 0 325 310 A (PHILIPS NV) 26 July 1989 (1989-07-26) * column 7, line 51 - column 8, line 32 * ---	1,8	G06F9/30 G06F9/38						
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			TECHNICAL FIELDS SEARCHED (Int.Cl.6)						
			G06F						
<p>The present search report has been drawn up for all claims</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Place of search</td> <td style="width: 33%;">Date of completion of the search</td> <td style="width: 34%;">Examiner</td> </tr> <tr> <td>THE HAGUE</td> <td>30 November 2000</td> <td>Daskalakis, T</td> </tr> </table>				Place of search	Date of completion of the search	Examiner	THE HAGUE	30 November 2000	Daskalakis, T
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THE HAGUE	30 November 2000	Daskalakis, T							
<p>CATEGORY OF CITED DOCUMENTS</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;">           X : particularly relevant if taken alone            Y : particularly relevant if combined with another document of the same category            A : technological background            O : non-written disclosure            P : intermediate document         </td> <td style="width: 50%; vertical-align: top;">           T : theory or principle underlying the invention            E : earlier patent document, but published on, or after the filing date            D : document cited in the application            L : document cited for other reasons            &amp; : member of the same patent family, corresponding document         </td> </tr> </table>				X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document				
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ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

EP 96 48 0056

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